

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-22 are currently pending in this application. By this Amendment, Applicants have amended Claims 1 and 21. Claims 1 and 21 are amended to be written in their original form, and thus no new matter is added.

In the outstanding Office Action, Claims 1-12 and 16-22 were rejected under 35 U.S.C. §102(e) as anticipated by Inoue et al. (U.S. Patent No. 6,501,767, hereinafter Inoue); and Claims 13-15 were indicated as being allowable if rewritten in independent form including the base claim and any intervening claims.

Applicants acknowledge with appreciation the indication of allowable subject matter.

With respect to the rejection of Claim 1, Applicants respectfully submit that Inoue does not teach or suggest every element of Claim 1.

In a non-limiting embodiment of the claimed invention, a position identifier management apparatus receives a query request from a node, which subsequently transmits a packet to the mobile computer. In response to the query, the position identifier management apparatus reports the binding information of the mobile computer to the node.

Claim 1 is directed to a position identifier management apparatus that includes "...transmitting means for transmitting the binding information in response to a query about the binding information concerning said mobile computer from another apparatus when said binding information is stored in said storage means." Indeed, Inoue does not teach or suggest this element of Claim 1.

On the contrary, the position identifier management apparatus disclosed in Inoue transfers a transmitted packet destined for a mobile computer to the mobile computer's current location rather than transmitting binding information. Inoue discloses a home

network 11 that includes mobile computer management device 5, which functions as a home agent according to the mobile IP address.¹ At a border between the organization network 1 and the Internet 6, there is a border gateway 4.² When the mobile computer 2 moves to a global network outside the organization, the mobile computer 2 transmits a registration request packet of the mobile IP to a global address interface of the border gateway 4.³ The border gateway transfers the packet to the mobile computer management device 5. The mobile management device transfers a reply packet (a registration success packet) to the border gateway 4, which relays the reply packet to the mobile computer 2.⁴

The mobile computer management device does not transmit the reply packet to another apparatus. The mobile computer management device transmits the reply packet back to mobile computer 2. Furthermore, the mobile computer management device does not transmit the reply packet in response to a query about binding information concerning the mobile computer. The mobile computer management transmits the reply packet in response to a registration request.

Thus, Inoue does not teach or suggest the claimed "...transmitting means for transmitting the binding information in response to a query about the binding information concerning said mobile computer from another apparatus when said binding information is stored in said storage means."

In view of the above-noted distinctions, Applicants respectfully submit that Claim 1 (and dependent Claims 2-5) patentably distinguish over Inoue. Applicants also submit that Claims 16, 21, and 22 (and dependent Claim 17) patentably distinguish over Inoue for at least the reasons given for Claim 1.

¹ Inoue, col. 8, lines 1-7.

² Inoue, col. 8, lines 8-13.

³ Inoue, col. 9, lines 40-49, corresponding to col. 4, lines 46-53.

⁴ Inoue, col. 10, lines 15-37.

With respect to the rejection of Claim 6, Applicants respectfully submit that Inoue does not teach or suggest every element of Claim 6.

Claim 6 is directed to a mobile computer which moves between networks, including:

first storage means for storing binding information including a compatible node identifier and a compatible position identifier, the compatible node identifier including a first virtual network identifier assigned to said mobile computer which moves between networks and a node for uniquely specifying said mobile computer, the compatible position identifier including a second network identifier which is usable only by mobile computers assigned to a network to which said mobile computer is connected and the node identifier;

second storage means for storing binding information concerning at least one of external mobile computers with which said mobile computer is to communicate, said binding information including a compatible node identifier and a compatible position identifier, the compatible node identifier including a first virtual network identifier assigned to said external mobile computer which moves between networks and a node identifier of said external mobile computer, the compatible position identifier including a second network identifier which is usable only by mobile computers assigned to a network to which said external mobile computer is connected and the node identifier of said external mobile computer;

determining means for determining whether the binding information is to be used for a packet transmitting or receiving operation; and

conversion means for performing, when said determining means determines that the binding information is to be used, a conversion operation by converting the compatible node identifier to the compatible position identifier when the packet is to be transmitted and by converting from the compatible position identifier to the compatible node identifier when the packet is to be received.

Indeed, Inoue does not teach or suggest a mobile computer as claimed in Claim 6.

On the contrary, Inoue discloses that the home agent, and not the mobile computer, stores binding information.⁵ The Office Action states that col. 4, lines 29-45 describe the claimed “first storing means for storing binding information.”⁶ However, col. 4, lines 29-45 only mention that the mobile computer includes a setting unit for storing information

⁵ Inoue, col. 10, lines 1-14.

⁶ Office Action, page 5, line 1.

indicating whether or not the mobile computer device is currently connected to a private address space identical to that of the home network. Thus, Inoue does not teach or suggest the claimed

first storage means for storing binding information including a compatible node identifier and a compatible position identifier, the compatible node identifier including a first virtual network identifier assigned to said mobile computer which moves between networks and a node for uniquely specifying said mobile computer, the compatible position identifier including a second network identifier which is usable only by mobile computers assigned to a network to which said mobile computer is connected and the node identifier.

Inoue does not teach or suggest a mobile computer with the claimed "...second storage means for storing binding information concerning at least one of external mobile computers with which said mobile computer is to communicate...." The Office Action states that col. 5, lines 25-35 describes the claimed "second storage means." However, col. 5, lines 25-35 only describes a packet transmission method that includes a step of storing information indicating whether or not the mobile computer device is currently connected to a private address space identical to that of a home network in which a mobile computer management device manages a current location address of the mobile computer device. This does not describe storing binding information in the mobile computer. The claim language makes clear that the binding information includes "a compatible node identifier and a compatible position identifier."

Furthermore, col. 5, lines 25-35 describes storing information about the mobile computer and not an "external mobile computer with which the mobile computer is to communicate." Thus, Inoue does not teach or suggest the claimed

second storage means for storing binding information concerning at least one of external mobile computers with which said mobile computer is to communicate, said binding information including a compatible node identifier and a compatible position identifier, the compatible node identifier including a first virtual network identifier assigned to said external mobile computer which moves between networks and a node identifier of said external mobile computer, the compatible

position identifier including a second network identifier which is usable only by mobile computers assigned to a network to which said external mobile computer is connected and the node identifier of said external mobile computer.

Claim 6 also recites "...determining means for determining whether the binding information is to be used for a packet transmitting or receiving operation..." Indeed, Inoue does not teach or suggest this element of Claim 6.

The Office Action states that col. 5, lines 35-45 disclose the claimed "determining means." However, col. 5, lines 35-45 only discloses storing a global address in an address space of a packet relay device, relaying a packet to be exchanged, and transmitting to the packet relay device a registration request." The steps described in Inoue do not equate to the claimed "determining whether the binding information is to be used for a packet transmitting or receiving operation." Thus, Inoue does not teach or suggest the claimed "determining means for determining whether the binding information is to be used for a packet transmitting or receiving operation."

Inoue does not teach or suggest the claimed

conversion means for performing, when said determining means determines that the binding information is to be used, a conversion operation by converting the compatible node identifier to the compatible position identifier when the packet is to be transmitted and by converting from the compatible position identifier to the compatible node identifier when the packet is to be received.

Inoue does not describe or suggest a mobile computer with converting means for converting the compatible node identifier to the compatible position identifier. Inoue requires the use of a border gateway 4 to allow a mobile computer to communicate with another communication end. When the mobile computer 2 has moved to a global network outside the organization, the mobile computer transmits a registration request packet of the mobile IP to a global address interface of the border gateway 4 at the exit of the organization

network 1 using an address set at the border gateway IP address field.⁷ The transmitting of a registration request packet does not equate to converting the compatible node identifier to the compatible position identifier. Thus, Inoue does not teach or suggest the claimed

conversion means for performing, when said determining means determines that the binding information is to be used, a conversion operation by converting the compatible node identifier to the compatible position identifier when the packet is to be transmitted and by converting from the compatible position identifier to the compatible node identifier when the packet is to be received.

In view of the above-noted distinctions, Applicants respectfully submit that Claim 6 (and Claims 7-15) patentably distinguish over Inoue. Applicants also submit that Claims 18 and 20 (and dependent Claim 19) patentably distinguish over Inoue for at least the reasons given for Claim 6.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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⁷ Inoue, col. 9, lines 40-49.